

- 1. (Cancelled)
- 2. (Currently amended) A universal meta model <u>implemented on a computer</u> readable medium or in computer memory comprising
  - a. means for representing a plurality of classes of objects;
  - b. means for representing a plurality of default class behavior categories;
  - c. means for representing a plurality of data members of classes of objects;
  - d. means for representing a plurality of default member behavior categories;
  - e. means for representing a plurality of relationships between classes of objects;
  - f. means for representing a plurality of relationships between objects; and
- g. means responsive to at least one of a-f for modeling data formations and validation constraints thereon.
- 3. (Original) A universal meta model as in claim 2 comprising means for representing a plurality of optional additional class behaviors for a plurality of class behavior categories.
- 4. (Original) A universal meta model as in claim 2 comprising means for representing a plurality of optional additional member behaviors for a plurality of member behavior categories.
- 5. (Original) A universal meta model as in claim 2 comprising means for representing a plurality of links between relationships between classes of objects.
- 6. (Original) A universal meta model as in claim 5 comprising means for representing a plurality of composite relationships composed of a plurality of links between a plurality of relationships between classes of objects.

- 7. (Original) A universal meta model as in claim 5 comprising means for representing a plurality of composite relationships composed of a plurality of links between a plurality of relationships between classes of objects.
- 8. (Original) A universal meta model as in claim 5 comprising means for representing direction of relation links.
- 9. (Original) A universal meta model as in claim 2 comprising means for representing a plurality of default relationship behavior categories.
  - 10. (Original) A universal data editor component comprising
    - a. a universal meta model as in claim 2;
    - b. means for storing data instantiations of said universal meta model classes;
    - c. means for storing data instantiations of said universal meta model members;
    - d. means for storing data instantiations of said universal meta model relations; and
    - e. means for storing data instantiations of said universal meta model relation links.
- 11. (Currently amended) A universal data editor component as in claim 10 comprising
- a. means for storing data instantiations of said universal meta model tree views; and
- b. means for storing data instantiations of said universal meta model tree levels[[;]].
- 12. (Currently amended) A universal data editor component as in claim 10 comprising
- a. means for storing data instantiations of said universal meta model elements representing instantiations of classes represented by said universal meta model classes; and

b. means for storing data instantiations of said universal meta model values representing instantiations of said universal meta model members[[;]].

- 13. (Currently amended) A universal data editor component as in claim 10 comprising
- a. means for storing data instantiations of said universal meta model elements representing instantiations of classes represented by said universal meta model classes; and
- b. means for storing data instantiations of said universal meta model values representing instantiations of said universal meta model members[[;]].
- 14. (Currently amended) A viewer and controller for universal data editor component comprising
  - a. a universal data editor component as in claim 10;
  - b. means for displaying a graphical representation of data;
  - c. means for displaying textual representation of data; and
  - d. means for displaying tabular representation of data[[;]].
- 15. (Currently amended) A viewer and controller for universal data editor component as in claim 14 comprising
  - a. means for displaying a graphical representation of data formations;
  - b. means for displaying textual representation of data formations; and
  - c. means for displaying tabular representation of data formation[[;]].
  - 16. (Cancelled)